



where

R¹ and R² are identical or different and are C₁-C₆-alkyl, linear or branched, and/or aryl;

R³ is C₁-C₁₀-alkylene, linear or branched, C₆-C₁₀-arylene, -alkylarylene or -arylalkylene;

M is calcium ions, magnesium ions, aluminum ions and/or zinc ions,

m is 2 or 3;

n is 1 or 3;

x is 1 or 2;

and comprising a at least one component B1, B2 and/or B3 wherein

B1 is a salt of 1,3,5-triazine compound with polyphosphoric acid with a number average degree of condensation n is higher than 20 and with the melamine content amounting to more than 1.1 mole of melamine per mole of phosphorus atom, ~~and a preferred pH of a 10 % slurry of that polyphosphate salt in water being higher than or equal to 4,5, wherein the preferred 1,3,5-triazine compounds are melam, melem, melon, especially melamine, or mixtures of these compounds, and~~

wherein B2 is a melamine polymetaphosphate having a ~~solubility~~solubility of from ~~0,040.01~~ to ~~0,100.10~~ g/100 ml in water at 25°C, a pH from 2.5 to 4.5 in the form of a 10 wt.% aqueous slurry at 25°C and a melamine content of from ~~1,01.0~~ to ~~1,11.1~~ mol per mol of phosphorus atom, wherein that component B2 is a melamine salt of a long-chain polyphosphoric acid represented by the formula (III)



wherein M is melamine, represented by the formula (IV)



H is a hydrogen atom, P is a phosphorus atom, and the degree (n) of polymerization of said melamine salt of linear phosphoric acid is an integer of at least 20, and

wherein B3 is a composite salt of polyphosphoric acid with at least one of melamine, melam and/or melem having a solubility in water (25°C) of 0.01 to 0.10g/100ml, a pH of 4.0 to 7.0 as measured using a 10% by weight aqueous slurry (25°C), and melamine contents of 0.05 to 1.00 mol (~~preferably 0.05 to 0.40 mol~~), melam contents of 0.30 to 0.60 mol (~~preferably 0.30 to 0.60 mol~~) and melem contents of 0.05 to 0.80 mol (~~preferably 0.30 to 0.80 mol~~), respectively, per mol of phosphorus atoms.

2. (Currently Amended) A flame retardant combination as claimed in claim 1, wherein R¹ and R² are identical or different and are C₁-C₆-alkyl, linear or branched and/or phenyl.

3. (Currently Amended) A flame retardant combination as claimed in claim 1 ~~or 2~~, wherein R¹ and R² are identical or different and are methyl, ethyl, n-propyl, isopropyl, n-butyl, tert-butyl, n-pentyl and/or phenyl.

4. (Currently Amended) A flame retardant combination as claimed in ~~one or more of claims 1 to 3~~claim 1, wherein R³ is methylene, ethylene, n-propylene, isopropylene, n-butylene, tert-butylene, n-pentylene, n-octylene or n-dodecylene.

5. (Currently Amended) A flame retardant combination as claimed in ~~one or more of claims 1 to 3~~claim 1, wherein R³ is phenylene or naphthylene.
6. (Currently Amended) A flame retardant combination as claimed in ~~one or more of claims 1 to 3~~claim 1, wherein R³ is methylphenylene, ethylphenylene, tert-butylphenylene, methylnaphthylene, ethylnaphthylene or tert-butyl naphthylene.
7. (Currently Amended) A flame retardant combination as claimed in ~~one or more of claims 1 to 3~~claim 1, wherein R³ is phenylmethylene, phenylethylene, phenylpropylene or phenylbutylene.
8. (Currently Amended) A flame retardant combination as claimed in ~~one or more of claims 1 to 7~~claim 1, wherein M is aluminum ions or zinc ions.
9. (Currently Amended) A method for ~~The use of a flame retardant combination as claimed in one or more of claims 1 to 8 for rendering~~ a thermoplastic polymers ~~polymer flame retardant, comprising the step of adding a flame retardant combination as claimed in claim 1 to the thermoplastic polymer wherein the thermoplastic polymers are HIPS (high impact polystyrene), polyphenylene ethers, polyamides, polyesters, polycarbonates or blends or polymer blends of the type ABS (acrylonitrile-butadiene-styrene) or PC/ABS (polycarbonate/acrylonitrile-butadiene-styrene) or PPE/HIPS (polyphenylene ether/high impact polystyrene), or polyamide, polyester or blends of PPE/HIPS.~~
10. (Currently Amended) The method ~~use of a flame retardant combination as claimed in claim 9, wherein each of the components A and B, independently of one another, is used at a concentration of from 1 to 30 preferably 3 to 20-% by weight, based on the plastic molding composition~~thermoplastic polymer.
11. (Currently Amended) A flame-retardant plastic molding composition comprising a flame retardant combination as claimed in claim 1 ~~one or more of claims 1 to 8,~~

~~where in the plastic is preferably a thermoplastic polymer selected from the type HIPS (high impact polystyrene), polyphenylene ethers, polyamides, polyesters, polycarbonates or blends or polymer blends of the type ABS (acrylonitrile-butadiene-styrene) or PC/ABS (polycarbonate/acrylonitrile-butadiene-styrene) or PPE/HIPS (polyphenylene ether/high impact polystyrene) plastics, or wherein the plastic is polyamides, polyesters or blends of PPE/HIPS.~~

12. (New) A flame retardant combination as claimed in claim 1, wherein a 10% slurry of the polyphosphate salt (B1) in water has a pH higher than or equal to 4.5.

13. (New) A flame retardant combination as claimed in claim 1, wherein the 1,3,5 triazine compounds are selected from the group consisting of melam, melem, melon, melamine and mixtures thereof.

14. (New) A flame retardant combination as claimed in claim 1, wherein the composite salt of the polyphosphoric acid with at least one of melamine, melam and melem (B3) has a melamine content of 0.05 to 0.40 mol, a melam content of 0.30 to 0.60 mol and a melem content of 0.30 to 0.80 mol, per mole of phosphorus atoms.

15. (New) The method as claimed in claim 9, wherein the thermoplastic polymer is selected from the group consisting of HIPS (high-impact polystyrene), polyphenylene ethers, polyamides, polyesters, polycarbonates or blends, ~~or~~ polymer blends of the type ABS (acrylonitrile-butadiene-styrene), ~~or~~ PC/ABS (polycarbonate/acrylonitrile-butadiene-styrene), ~~or~~ PPE/HIPS (polyphenylene ether/high-impact polystyrene), ~~or~~ polyamide, polyester ~~or~~ and blends of PPE/HIPS.

16. (New) The method as claimed in claim 9, wherein each of the components A and B, independently of one another, is used at a concentration of from 3 to 20% by weight, based on the thermoplastic polymer.

17. (New) The flame-retardant plastic molding composition as claimed in claim 11, wherein the plastic molding composition is a thermoplastic polymer selected from group consisting of HIPS (high-impact polystyrene), polyphenylene ethers, polyamides, polyesters, polycarbonates or blends, polymer blends of the type ABS (acrylonitrile-butadiene-styrene), PC/ABS (polycarbonate/acrylonitrile-butadiene-styrene), PPE/HIPS (polyphenylene ether/high-impact polystyrene) plastics, polyamides, polyesters and blends of PPE/HIPS.